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# Academic Invulnerability Among Mexican Americans: A Conceptual Framework

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# A Conceptual Framework

It has been widely documented that the academic achievement of Mexican American students is linked to a number of sociocultural variables. Among the sociocultural variables associated with academic achievement are the educational and occupational attainment levels of parents, family income and composition, ethnic and language minority status, and the absence of learning materials in the home (e.g., Arias, 1986; Rumberger, 1983, 1987; Steinberg, Blinde, & Chan, 1984). The assumption is generally held that these sociocultural variables influence or cause the disproportionately high level of academic failure and attrition found among Mexican American students. Indeed, several major reports document that Mexican American students are far more likely to leave high school before completion than the general population (Brown, Rosen, Hill, & Olivas, 1980; Carnegie Council on Policy Studies and Higher Education, 1979; Hirano-Nakanishi, 1986; National Commission on Secondary Education for Hispanics, 1984; National Council of La Raza, 1992; Rumberger, 1983; Valverde, 1987). A report prepared by the Congressional Research Service (1986) finds that Mexican Americans have the lowest median number of school years completed (9.9) and the lowest proportion of high school graduates (40.8%) in the United States. The National Center for Educational Statistics (1989) estimates that national dropout rates stand at 36% for Hispanics, 15% for Blacks, and 13% for Whites.

The low educational and occupational status of many Mexican American families has been viewed as an influential determinant of student academic failure. Several studies (Barrington & Hendricks, 1989; Laosa, 1982; Rosenthal, Milne, Ellman, Ginsburg, & Baker, 1983; Rumberger, 1983; Steinberg et al., 1984) have suggested that students who come from economically poor families are more likely to be delayed in school

or to leave school prematurely than those from more economically stable families. Notwithstanding, when socioeconomic factors such as income, number of siblings, marital status of parents, and amount of reading material in the home are controlled, Hispanic students leave school at a rate far in excess of either Black or Anglo students (Steinberg et al., 1984).

Although a host of studies have identified a constellation of demographic factors that predispose Mexican American students towards academic failure, very little attention has been given to students who overcome a number of socioeconomic and cultural disadvantages to succeed academically. We know little about academically successful students and what distinguishes them from their classmates who experience academic underachievement and failure. Why do some Mexican American students do well while others fail despite sharing similar socioeconomic and cultural backgrounds?

The purpose of this paper is to present a conceptual framework that assigns a central role to the interaction among sociocultural, personal, and environmental factors in explaining the academic performance of Mexican American high school students. A notion of academic invulnerability is used as a heuristic tool with which to consider the entire spectrum of academic achievement found in the Mexican American student population. Consistent with the research on invulnerable children, this paper focuses on the personal and environmental resources that students rely on to meet educational challenges and opportunities. We hope that our overview of the existing literature on the educational experience of Mexican American students will identify gaps in the research and serve as an impetus for new research aimed at improving the educational status of Mexican American students.

## **Cultural Change and Psychosocial Adjustment**

Researchers have suggested that the cultural mismatch in the values of Mexican American children and those required within the educational system was largely responsible for the difficulties that Mexican American children experienced in the classroom (Sue & Padilla, 1986). Indeed, much of the early work in this area focused on the discontinuities in the linguistic, cognitive, and personality characteristics of Mexican American and majority group children (for reviews see Carter & Segura, 1979; Kagan & Buriel, 1977; Witkin & Berry, 1975). The general assumption of much of this research is that Mexican American children lack the necessary competencies, values, and personality characteristics to succeed in the cultural milieu of American schools.

A cultural mismatch interpretation may suggest that ethnic minority children need to adapt, through acculturation, to the school environment. While acculturative change occurs naturally when members of two or more cultural groups come into contact, acculturation can also be a difficult and stressful process. Children undergoing cultural change must not only come to understand the norms and expectations of the new culture, but they must also create for themselves an identity that integrates the native and new cultures. As a result, this process involves difficult, sometimes painful, decisions as to which cultural values and practices to adopt and integrate into a self-identity (Padilla, 1980, 1986).

Additionally, many Mexican American families rely on their children to serve as interpreters of a new language and culture. Because Mexican American children often learn English more quickly or are more familiar with the new cultural environment, they are needed to interpret or translate for their parents. As children become increasingly involved in the financial, legal, and social worries and concerns of the family, the traditional parent-child-relationship changes, sometimes leading to intrafamiliar and role conflicts (Szapocznik, Kurtines, & Hanna, 1979).

Several studies have found a significant relationship between life event stressors and school adjustment and

achievement. In an ethnographic study of Mexican American elementary school students, Trueba (1983) described a number of students who were experiencing serious problems adjusting to school. These children showed manifestations of maladjustment that included: frustration and sadness, fatigue, lack of concentration, aggression, loneliness, acting out, persistent and predictable stomach problems, and general anxiety.

In a cross-cultural study, Yamamoto and Brynes (1984) found that Hispanic fourth, fifth, and sixth graders reported a markedly higher incidence of school related stressors as compared to majority group students. Specifically, the Hispanic students reported significantly higher occurrences of stress for events such as academic retainment (28% vs 14%), poor report card (62% vs 39%), and being sent to the principal (63% vs 48%). The Hispanic children also rated 13 of the 20 life events as more stressful than did the majority group children.

Although these results suggest that life events research may be a useful procedure for predicting school adjustment and performance, the representativeness and appropriateness of the items included in the various life events measures have been questioned (Compas, 1987; Compas, Davis, & Forsythe, 1985). Research suggests that the events commonly represented in children's life event checklists may not be appropriate for Mexican Americans or members of all socioeconomic and ethnic groups (Cervantes & Castro, 1985; Cervantes, Padilla, & Salgado de Snyder, 1990, 1991).

In response to the limitations of commonly used life events scales for children and adolescents (Elias, Gara, & Ubriaco, 1985; Garrison, Schoenbach, Schluchter, Kaplan, 1987; Lewis, Siegel, & Lewis, 1984; Safer, 1986; Spirito, Stark, Grace, & Stamoulis, 1991; Yamamoto, 1979), the Hispanic Children's Stress Inventory was developed (Cervantes, Padilla, & Salgado de Snyder, 1991; Padilla, 1986; Mena, Padilla, & Maldonado, 1987). It includes a host of potentially stressful events based on the sociocultural experience of Hispanic children and adolescents. Specifically, the Hispanic Children's Stress Inventory contains stressors associated with socioeconomic status, cultural and language differences, discrimination, and other aspects of the acculturation process, such as leaving relatives and friends behind when moving, feeling pressured to speak only Spanish at home, and living in a home with many people.

In a study that examined a cohort of economically disadvantaged Mexican American tenth graders to predict their patterns of achievement, Alva (1991) found a negative relationship between psychosocial stress and high school grades and standardized test scores, using the Hispanic Children's Stress Inventory to measure psychosocial stress. Compared to the students who were academically successful, low achieving students were found to experience more family conflicts and difficulties in intergroup relations.

Together, these findings support the contention that cultural change can be a difficult process, particularly for elementary school children and adolescents. Caught between conflicting demands and expectations, while struggling to form an identity that successfully integrates the old and new features of a cultural reference group, cultural change for many Mexican America students can be stressful.

Nonetheless, not all adolescents who experience cultural turmoil or live in economically disadvantaged environments develop psychological problems or experience academic difficulties. Why? The studies on invulnerable children suggest that to a large extent resiliency depends on two key issues: (a) the attitudes, skills, and knowledge children possess, and (b) the number and type of environmental resources in place to provide support and ameliorate stress. In the spirit of work that has focused on the antecedents and correlates of invulnerability, we present research that has examined the role of personal and environmental factors in mediating differential patterns of achievement among Mexican Americans.

# **Academic Invulnerability**

Garmezy (1981, 1983) introduced the notion of invulnerability to describe children who, despite major psychological and environmental disadvantages, thrive even under the most adverse conditions. Garmezy's description of invulnerable children has been largely developed and applied to majority group children of economically disadvantaged families or to those who live with parents who suffer from clinically diagnosed mental disorders. In this paper the concept of academic invulnerability is introduced because we believe there is a parallel relation between the mediating role of protective factors and successful efforts of Mexican American students to cope with educational demands and challenges. Many Mexican American students can be described as academically invulnerable, sustaining high levels of achievement, despite conditions and events that place them at risk for academic failure. However, large gaps exist in our understanding of the factors and processes that determine academic invulnerability (Quadrel, Fischhoff, & Davis, 1993). We have simply not studied the coping resources of Mexican American students as thoroughly as we have studied the risk factors associated with academic failure (Padilla, Cervantes, Maldonado, & Garcia, 1988). A handful of educational studies point to enduring personal and environmental characteristics of academically successful or invulnerable Mexican American students that distinguish them from other students who are academically less successful.

## **Protective Resources: Personal and Environmental Factors**

If we are to understand processes that enhance positive development and prevent maladjustment among atrisk students, we must examine the coping processes that mediate a child's reaction to stressful life events and conditions (Bolger, 1990; Compas, 1987; Lazarus & Folkman, 1984). Protective factors are defined as "those attributes of persons, environments, situations, and events that appear to temper predictions of psychopathology based upon an individual's at-risk status" (Garmezy, 1983, p. 73).

Within the general clinical work on invulnerability, researchers have identified two generic types of protective factors that seem to be evident among invulnerable children: *personal* and *environmental resources* (Compas, 1987; Garmezy, 1981, 1983; Garmezy & Rutter, 1983; Rutter, 1979, 1987; Werner & Smith, 1982). Personal resources include the personality characteristics and attitudes that children possess that serve to mediate the effects of detrimental environmental circumstances. The concept of environmental resources refers to external sources of information, support, and affective feedback, which, when available, can affect how well children adapt to their environment. Environmental resources have been described as information or actual supportive behaviors leading individuals to perceive they are cared for, esteemed, and valued by members of their social network (Barrera, 1986; Cobb 1976; Sarason, Shearin, Pierce, & Sarason, 1987). While external mediators have often included significant individuals in a child's life (e.g., parents, grandparents, friends), the schools and other social institutions can serve as significant environmental resources. Supportive teachers and the school environment can moderate the negative effects of stress on school adjustment. The following section presents the scant but rapidly growing body of research that examines the relationship between psychosocial stress, personal and environmental resources, and the academic adjustment and performance of Mexican American high school students.

## Personal Resources and Achievement

Research conducted with majority group children suggests that causal attributions and social problem-solving skills may play an important role in mediating the academic achievement of Mexican American students (Dubow & Tisak, 1989; Dubow, Tisak, Causey, Hryshko, & Reid, 1991; Feshbach & Feshbach,

1987; Luthar, 1991; Stipek & Weisz, 1981; Weiner, 1979; Wentzel, 1991; Wong & Csikszentmihalyi, 1991).

In an interview study of 45 Mexican American professionals who had obtained graduate academic degrees (PhD, MD, and JD), despite their families' low socioeconomic and formal educational standing, Gandara (1982) reports that 51% of the respondents stated that persistence was of critical importance in determining their overall high academic attainment, followed by hard work and ability. Gender differences were also reported. While Mexican American females were more likely to attribute their academic success to environmental factors, such as supportive family members, Mexican American males were more likely to attribute their academic success to hard work and ability.

These findings are consistent with the work of Dweck and others (Dweck & Licht, 1980; Dweck & Wortman, 1982) on children's causal attributions to academic achievement tasks. It has been shown repeatedly that mastery-oriented children attribute their success to stable personal characteristics and attribute negative outcomes to unstable factors such as effort. On the other hand, helpless children attribute their failure to a lack of personal ability. Gender differences in causal attributions have also been shown, with girls more likely to demonstrate the causal attributions characteristic of academically helpless children.

Relevant to Mexican Americans is the role stressful life events play on the development of causal attributions. Minority students who chronically experience a number of uncontrollable and stressful events, such as discrimination or poverty, may develop feelings of helplessness that interfere with academic motivation and performance (Alva, 1991). If these conditions persist, these children may come to believe that they cannot overcome failure.

Beyond the direct link of personality characteristics and school performance, growing evidence suggests that the attribution pattern of helpless children is causally linked to socialization practices observed in school classrooms (Dweck, Goetz, & Strauss, 1980). Dweck demonstrates that teachers can influence learning and achievement by communicating attributions differently to boys and girls. The variability of praise and criticism offered by teachers influences the degree to which students believe that they control and are responsible for events in school (Dweck et al., 1980).

A literature review by Garza and Lipton (1982) points to the need to focus greater attention on the contextual milieu in which Mexican American personality develops. In evaluating research on Mexican American achievement, it is important to consider how the educational context contributes to and influences the personality development of Mexican American children. The educational context provides social and academic opportunities and feedback that contribute to the personality development of students. We turn now to studies that consider the nature and quality of schools (for a review see Minuchin & Shapiro, 1983).

#### Environmental Resources and Achievement

There is no question that the educational system plays a major role in providing students with the opportunity to learn basic skills and information. However, the impact of schools in relation to the socialization of Mexican American students is also quite powerful. The interactive exchange between Mexican American students and the values and practices of schools and classrooms form the structure in which Mexican American children develop behaviors, beliefs, and aspirations in relation to their education. It is from this perspective that we present and evaluate research on school effects, paying particular attention to variations in social organization and educational practices as these may affect the academic achievement of Mexican American children.

# The School as a Social Differentiation Mechanism

In our society, academic achievement is largely valued because of the relationship between educational attainment and socioeconomic mobility. There is general agreement that academic success facilitates the opportunity to improve one's social and economic standing within society. According to Ogbu (1978, 1988, 1991, 1992; Ogbu & Matute-Bianchi, 1986), over the years various cultural groups have developed folk theories about how American society works and, more specifically, about the relationship between academic achievement and social mobility and status. These are subjective beliefs and attitudes that minority students may develop as a result of experiences and interactions with family members, teachers, and other agents in their social context.

Whereas Mexican American parents tend to value and encourage education (Fleming, 1982), children also respond to the beliefs that school teachers and administrators have about their socioeconomic mobility. Ogbu (1988, 1991, 1992) argues that minority students fail to do well in school because in many ways the educational climate and teacher-student interactions communicate to students a weak link between academic success and social mobility. For example, the disproportionate number of Mexican American students who do not fare well within the educational system not only serves as an unfavorable reflection of the educational opportunities available to Mexican American students but also limits the number of successful role models available to students. Consequently, some children come to believe that school success does not necessarily lead to social mobility, which, in turn, affects the way they perceive their schooling and the amount of effort they exert in pursuing and completing a formal education. Ogbu (1991) suggests that some minority group students perceive or come to believe that schooling or graduating from high school or college bring few returns, especially when compared to the resources and effort that they have invested in their schooling. The perceptions and behaviors of these students have been characterized by feelings of bitterness, frustration, and resentment, which often lead to dropping out of school and other socially maladaptive behaviors.

Similarly, the historical and political past of Mexican Americans in the United States may also influence children's social perceptions and evaluations (Ogbu, 1988). Even without the specific knowledge of historical figures or events, the nature of current intergroup relations (between majority and minority group members) can affect students' academic orientations and expectations. With time, "children may increasingly realize actual societal limits in social, economic, and educational opportunities available to Mexican Americans, and thus increasingly experience a discrepancy between their goals and a sense that they can obtain those goals" (Knight, Kagan, Nelson, & Gumbiner, 1978, p. 95). Thus, Mexican American children's appraisal of majority-minority group interactions may come to influence what they expect from their interactions with society at large.

# The Qualitative Aspects of Schooling

Research on the qualitative aspects of the schooling process suggests that the subjective appraisal that students have of school events accounts for important variations in their academic performance (Chavez, 1984; Edmonds, 1986; Minuchin & Shapiro, 1983). More specifically, teachers' expectations, the patterns of interaction between teachers and students, and the subjective climate of schools play a major role in the educational experiences of students.

In an observational study that examined the effects of gender, socioeconomic status, language proficiency, and ethnicity on teacher-student interactions, Laosa (1977) found that teachers' disapproving behavior was

related to students' English proficiency. Teachers were more likely to direct disapproving responses toward the Mexican American children with limited English proficiency. No differences were found between English-dominant Mexican American students and Anglos.

Buriel (1983) observed teacher interactions with Mexican American and Anglo fourth and fifth grade students who were matched on the basis of socioeconomic status, reading and math ability, and English proficiency. He reported that Mexican American children received less teacher affirmation following correct responses than their Anglo classmates did. Teacher affirmations were also found to be correlated positively with the academic achievement of students, as measured by their performance on standardized reading and math tests.

Differential patterns of interaction between teachers and students have also been reported by high school dropouts (Padilla & Alva, 1988; Stevenson & Ellsworth, 1993; Valverde, 1987; Wehlage & Rutter, 1986; Weis & Fine, 1993). In general, high school dropouts had less favorable evaluations of their school's climate and were more likely to report that teachers did not care for them and treated them in an unfair and arbitrary manner.

We must also recognize that this disaffection can also result from a school climate marked by ethnic hostility, violence, and prejudice. A qualitative study of immigrant students revealed that almost every student in the sample (N=360) reported incidents of "being called names, pushed or spat upon, deliberately tricked, teased and laughed at because of their race, language difficulties, accent or foreign dress" during their first year in American schools (Olsen & Chen, 1988, p. 33).

Schools also contribute to disengagement and dissatisfaction through subtle policies and practices, such as tracking students primarily on the basis of standardized tests (Gamoran, 1987; Oakes, 1985), advocating for a core curriculum that reflects primarily the mainstream culture (Bennett, 1984; Finn, 1989), and misclassifying students based on culturally biased tests and procedures (Medina, 1989; Padilla & Wyatt, 1983).

In short, the degree to which psychosocial stress or dissatisfaction is experienced by Mexican American students may depend on the goodness-of-fit among several contextual events. For example, if the educational expectations of a Mexican American student are higher at home than they are at school, then a poor fit exists between the student's family and school environment. An adaptive resolution of this conflict may be facilitated by the personal resources available to the student (e.g., attributions of cause or self-esteem) or environmental resources (e.g., a supportive teacher or friend). The proposed conceptual framework demands that the conceptualization of Mexican American children's schooling experiences take into account their personal resources, the environmental features, as well as their sociocultural background.

# **Summary**

Overall, the educational status of Mexican American students is alarmingly low. Compared to their majority group peers, Mexican American students lag far behind on a number of indicators of student academic success. Although the severity of academic underachievement is recognized by educators and policy makers, very little is known about the factors and processes that influence and mediate this problem.

To date, research in this area has centered around socioeconomic and cultural factors contributing to academic underachievement. The available literature reveals a striking need for multivariate paradigms for guiding educational research with Mexican Americans (Bilingual Education Office, 1986). A conceptual

framework is presented for testing a more interactive approach to the study of Mexican American academic performance. The model consists of three factors < sociocultural, personal, and environmental < which interact to influence the cognitive appraisal that students have of the schooling process as well as outcome measures of academic performance. Thus, the model calls for a multivariate assessment of these factors in the study of Mexican American academic achievement. A common shortcoming of early studies in this area was their unidirectional focus.

Psychosocial stress plays a central role in our conceptual framework. In order to explain why some Mexican American students do quite well in school while others fail, despite sharing a similar sociocultural background, the mediating role of psychosocial stress was discussed. While the underachievement and academic failure of some Mexican American students may indeed be due to lack of ability or skills, academic performance may be more accurately seen as the product of subjective perceptions and evaluations that students have of their schooling experiences. This position is consistent with recent studies on children's appraisal of stressful experiences, many of which are school-related. Similarly, the results of several studies of school and classroom climates (Chavez, 1984) emphasize the need to examine subjective accounts of the schooling process. Thus, the significance of socioeconomic and cultural differences may be that they function as risk factors. Within the educational context, socioeconomic and cultural risk factors may develop into much larger and more widespread conflicts between students and features of the environmental context. As suggested by Garmezy's (1981, 1983) notion of invulnerability, the successful resolution of such conflict may depend on the personal and environmental resources available to students labeled at-risk. Finally, educational practices and policy must be guided by a comprehensive understanding of factors and processes influencing the educational experience of Mexican American students. While the available literature is scant, we hope that our conceptual framework will influence the conceptualization of new educational research and policy directives aimed at improving the educational status of Mexican American students.

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## Footnote

1) Literature on Hispanics, which generally includes all of the major Hispanic subgroups, will be used when information only on Mexican Americans is not available. Because of the limited research in this area, it is difficult to report only on the educational experience of Mexican American students. Moreover, the available educational research and reports do not always identify Mexican Americans as a separate subgroup.

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